

IN THE CLAIMS:

1. (Previously amended) A method for executing a function on a server in a distributed data processing system, the method comprising the computer-implemented steps of:
 - receiving a request for a function, wherein the request comprises an input specifying a server name, wherein the server responds to requests directed to a set of server names;
 - generating a server name mask based on the server name; and
 - executing the function in a server name context on the server, as directed by the input specifying the server name, based on the generated server name mask.
2. (Original) The method of claim 1 wherein the server name context on the server comprises a set of resources associated with a server name.
3. (Original) The method of claim 2 further comprising identifying a membership of a resource within the set of resources for the server name context.
4. (Original) The method of claim 3 further comprising generating a server name tag for the server name, wherein the membership of the resource in the set of resources is identifiable by the server name tag associatively stored with the resource.
5. (Original) The method of claim 4 wherein the server name tag is generated based on a value of the server name and a value derived from a data structure that stores the server name.

6. (Original) The method of claim 5 wherein the value derived from the data structure is a position value of the server name within a server name table that stores the set of server names.

7. (Original) The method of claim 1 wherein the request for the function is received from a network.

8. (Previously amended) A method for executing a function on a server in a distributed data processing system, the method comprising the computer-implemented steps of:

receiving a request for a function, wherein the request comprises an input specifying a server name, wherein the server responds to requests directed to a set of server names;

locating the server name in an entry of a server name table;

obtaining a location index for the entry;

generating a server name mask based on the location index; and

executing the function in a server name context on the server as directed by the input specifying the server name.

9. (Previously amended) A method for executing a function on a server in a distributed data processing system, the method comprising the computer-implemented steps of:

receiving a request for a function, wherein the request comprises an input specifying a server name, wherein the server responds to requests directed to a set of server names;

generating a server name mask based on the server name;

retrieving a server name mask for a resource from a resource data structure;

comparing the generated server name mask with the retrieved server name mask to identify whether the resource is applicable to the server name; and

executing the function in a server name context on the server as directed by the input specifying the server name.

10. (Original) The method of claim 9 further comprising:
repeatedly identifying a plurality of resources that are applicable to the server name by searching a plurality of resource data structures for matching server name masks.
11. (Original) The method of claim 9 wherein the comparison of server name masks is a bitwise AND operation.
12. (Previously amended) A data processing system comprising:
means for receiving a request for a function, wherein the request comprises an input specifying a server name, wherein the server responds to requests directed to a set of server names;
means for generating a server name mask based on the server name; and
means for executing the function in a server name context on the server, as specified by the input containing the server name, based on the generated server name mask.
13. (Original) The data processing system of claim 12 wherein the server name context on the server comprises a set of resources associated with a server name.
14. (Original) The data processing system of claim 13 further comprising identification means for identifying a membership of a resource within the set of resources for the server name context.
15. (Original) The data processing system of claim 14 further comprising generation means for generating a server name tag for the server name, wherein the membership of the resource in the set of resources is identifiable by the server name tag associatively stored with the resource.

16. (Original) The data processing system of claim 15 wherein the server name tag is generated based on a value of the server name and a value derived from a data structure that stores the server name.

17. (Original) The data processing system of claim 16 wherein the value derived from the data structure is a position value of the server name within a server name table that stores the set of server names.

18. (Previously amended) A data processing system comprising:

means for receiving a request for a function, wherein the request comprises an input specifying a server name, wherein the server responds to requests directed to a set of server names;

locating means for locating the server name in an entry of a server name table;

obtaining means for obtaining a location index for the entry;

generating means for generating a server name mask based on the location index;

and

means for executing the function in a server name context on the server as specified by the input containing the server name.

19. (Previously amended) A data processing system comprising:

means for receiving a request for a function, wherein the request comprises an input specifying a server name, wherein the server responds to requests directed to a set of server names;

generating means for generating a server name mask based on the server name;

retrieving means for retrieving a server name mask for a resource from a resource data structure;

comparing means for comparing the generated server name mask with the retrieved server name mask to identify whether the resource is applicable to the server name; and

means for executing the function in a server name context on the server as specified by the input containing the server name.

20. (Original) The data processing system of claim 19 further comprising:
repeatedly identifying a plurality of resources that are applicable to the server name by searching a plurality of resource data structures for matching server name masks.
21. (Previously amended) A computer program product on a computer readable medium for use in a data processing system, the computer program product comprising:
first instructions for receiving a request for a function, wherein the request comprises an input specifying a server name, wherein the server responds to requests directed to a set of server names;
second instructions for generating a server name mask based on the server name and
third instructions for executing the function in a server name context on the server, as specified by the input containing the server name, based on the generated server name mask.
22. (Original) The computer program product of claim 21 wherein the server name context on the server comprises a set of resources associated with a server name.